DOCUMENT RESUME

ED 404 968 HE 030 011

TITLE Performance and Characteristics of Maryland Students Who Have Taken the SAT.
INSTITUTION Maryland State Higher Education Commission, Annapolis.
PUB DATE Dec 95
NOTE 39p.
PUB TYPE Statistical Data (110)

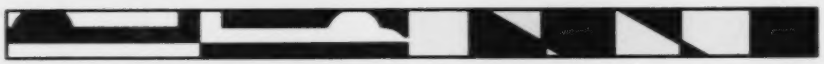
EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS Achievement Tests; Aptitude Tests; Black Students; *College Bound Students; *College Entrance Examinations; Comparative Analysis; Higher Education; National Competency Tests; Objective Tests; *Racial Differences; Scores; *Sex Differences; Standardized Tests; Statistical Analysis; Tables (Data); *Test Results; Test Score Decline; Trend Analysis
IDENTIFIERS African Americans; *Maryland; *Scholastic Assessment Tests

ABSTRACT

This annual report examines trends in Scholastic Assessment Test (SAT) data for Maryland vis-a-vis national trends. Major findings include the following: (1) composite SAT scores for Maryland students trail the national average for the first time since 1982; (2) composite SAT scores of African-Americans in Maryland have consistently trailed those of whites; (3) composite SAT scores of African-American men in Maryland fell seven points, with all of the drop being in the math portion of the test, while scores of African-American women, and well as those of white men and women, increased; (4) Maryland women have gained ground vis-a-vis men on both verbal and math SAT scores; and (5) the percentage of Maryland students planning to major in health fields has risen sharply, while the proportion intending to study business has fallen. Additionally, tables provide SAT trend data for: Maryland versus national scores overall; Maryland versus national scores by gender; Maryland versus national scores by race; for African-Americans versus whites; by race and gender; for the Mid-Atlantic region; by high school class rank; (7) by intended major; trends in intended major for Maryland college-bound seniors; and trends for college-going students who took rigorous levels of high school preparation. (CH)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

HE 030 011



MARYLAND HIGHER EDUCATION COMMISSION

ED 404 968

PERFORMANCE AND CHARACTERISTICS OF MARYLAND STUDENTS WHO HAVE TAKEN THE SAT

PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Maryland Higher Education Commission

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

This document has been reproduced as received from the person or organization originating it.

Minor changes have been made to improve reproduction quality.

Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

DECEMBER, 1995

BEST COPY AVAILABLE

MARYLAND HIGHER EDUCATION COMMISSION
16 Francis St., Annapolis, MD 21401

MARYLAND HIGHER EDUCATION COMMISSION

Edward O. Clarke, Jr., Chairman

The Honorable J. Glenn Beall, Jr.

J. Henry Butta

Terry L. Lierman

Osborne A. Payne

R. Kathleen Perini

Charles B. Saunders, Jr.

Terra N. Smith

Richard P. Streett, Jr.

Constance Cornell Stuart

Otis Warren, Jr.

Albert Nathaniel Whiting

Patricia S. Florestano, Ph.D.
Secretary of Higher Education

BEST COPY AVAILABLE

PERFORMANCE AND CHARACTERISTICS OF MARYLAND STUDENTS WHO HAVE TAKEN THE SAT

The College Board publishes annual information concerning the performance and characteristics of college-bound high school seniors who have taken the Scholastic Assessment Test (SAT). This report examines trends in the SAT data in Maryland and nationally.

Overall Performance

Maryland's composite SAT scores rose one point to 909 (430 in verbal and 479 in math) in the past year. However, the composite scores nationally vaulted eight points to 910 (428 in verbal and 482 in math). As a result, Maryland trails the national SAT average for the first time since 1982.

Maryland's composite SAT scores are slightly lower than they were 10 years ago, while those nationally are higher. Verbal scores are lower and math scores are higher than they were in 1986 both in Maryland and nationwide. There has been a steady increase, in Maryland and across the country, in math scores since 1991.

Performance by Ethnicity and Gender

The different increases in the scores of Maryland's college bound seniors and their counterparts nationally can be explained largely by the performance of African-American men. The composite SAT scores of African-American men plummeted by seven points in Maryland in the past year, all of it the result of a drop in the math portion of the test. In comparison, the composite SAT scores of African-American women and white men and women rose. Nationally, the composite scores of both men and women increased in the past year.

As a result of the decline in the scores of men, Maryland's African-American high school seniors, who have continually exceeded their national counterparts on the SAT, did so only narrowly this year (745 to 744). The scores of African-Americans have consistently trailed those of whites by a wide margin, both in Maryland and nationally. This gap has not shrunk in Maryland during the past 10 years and only slightly nationwide. The inability of African-Americans in Maryland to reduce the difference with whites has been due to the performance of men. The composite scores of African-American men in Maryland have fallen by 17 points since 1987, while those of African-American women have risen by 17.

The drop in the scores of African-American men in Maryland is probably a product of the number of these students who are taking the SAT. Since 1987, the pool of African-American men in the state who participated in the SAT leaped 36 percent, compared to a 3 percent decline among all students. Many of the additional African-American men taking the SAT may be less prepared for college entrance examinations than are traditional test-takers. Research has found that as enrollments rise, the number of less well-prepared students increase proportionately.

The composite scores of white men in Maryland have been essentially flat since 1987, while those of white women have surged by 23 points. Consequently, in 1995, women in Maryland scored higher than men for the first time on the verbal portion of the SAT (431 to 430). While men in Maryland continued their wide edge over women on the math section (498 to 463), women closed the gap by six points in the past year.

Math scores of women are considerably higher, both in Maryland and nationally, than they were in 1986. The verbal scores of men, in Maryland and nationwide, are much lower than they were 10 years ago, while those of women are about the same. As a result, the composite SAT scores of women, in Maryland and nationally, are higher than they were 10 years ago, while the scores of men are lower.

Performance by Class Standing

Maryland's best students have performed better on the SAT than did their counterparts nationally. Maryland seniors who ranked in the top tenth of their high school class have consistently outscored those nationwide.

Regional Comparisons in Performance

Maryland seniors have consistently outscored students in neighboring states and jurisdictions in which at least half of the college-bound high school graduates have taken the SAT: Delaware, District of Columbia, New Jersey, New York, North Carolina, Pennsylvania, and Virginia.

Performance of Students by Intended Major

Maryland students who indicated that they planned to major in mathematics, physical and biological sciences, humanities, foreign languages, and engineering have continually scored above the state average on the SAT. Those intending to study mathematics and the physical sciences have had the highest scores. Students who reported plans to major in business, education, computer science, health and agriculture have consistently trailed the average.

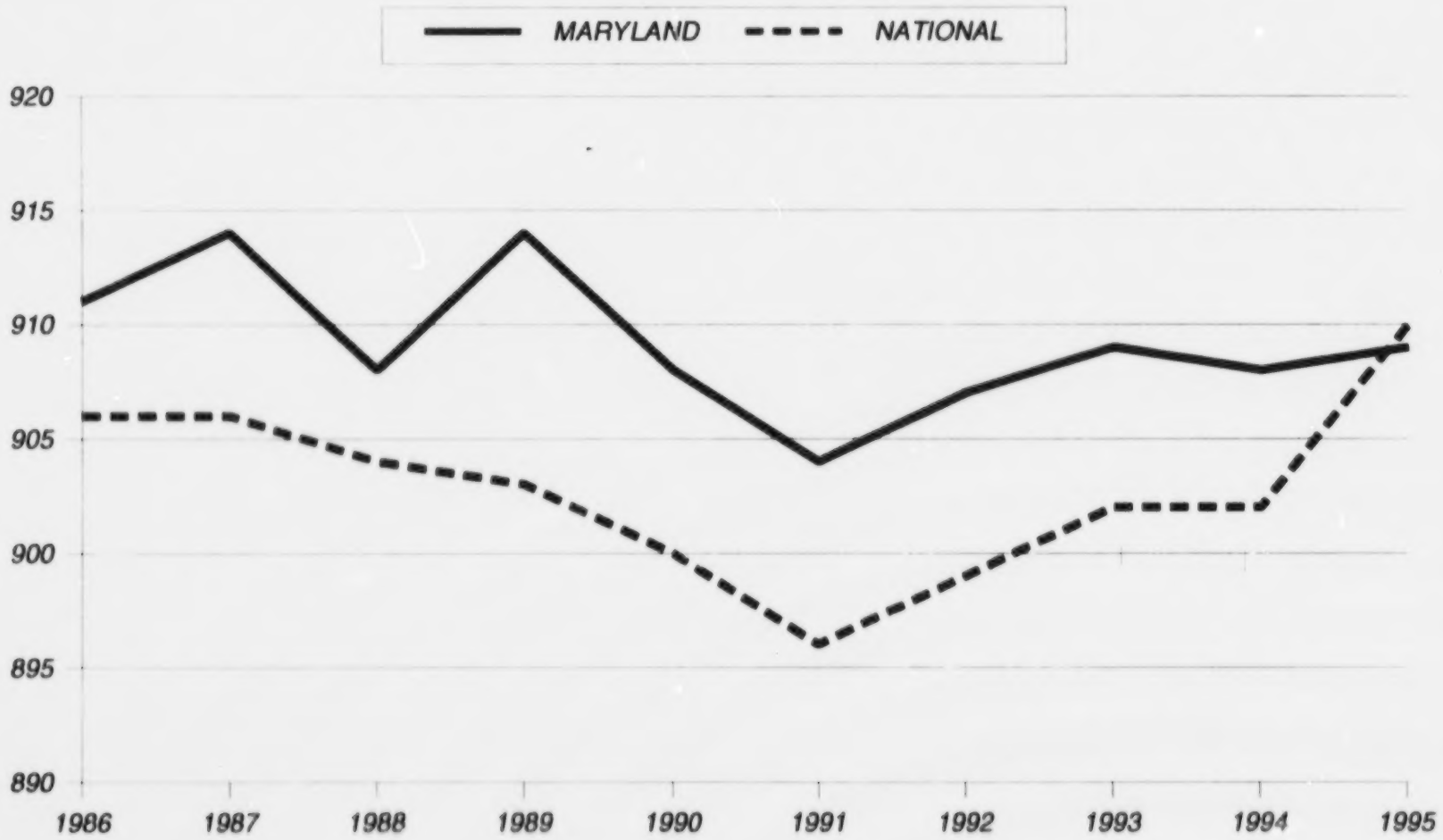
Intended Major of Students

The percentage of Maryland high school seniors intending to major in health fields has risen to 17 percent from 10.5 percent five years ago. There also has been a steady increase to 7 percent in the proportion of students planning to study in the biological sciences, many of whom may seek employment in allied health areas. The number who plan to major in business has fallen to below 14 percent from 23 percent in 1989. Engineering represented the choice of 9 percent of the students, and education constituted 7 percent. Four percent plan to study computer science--half as many as 10 years ago.

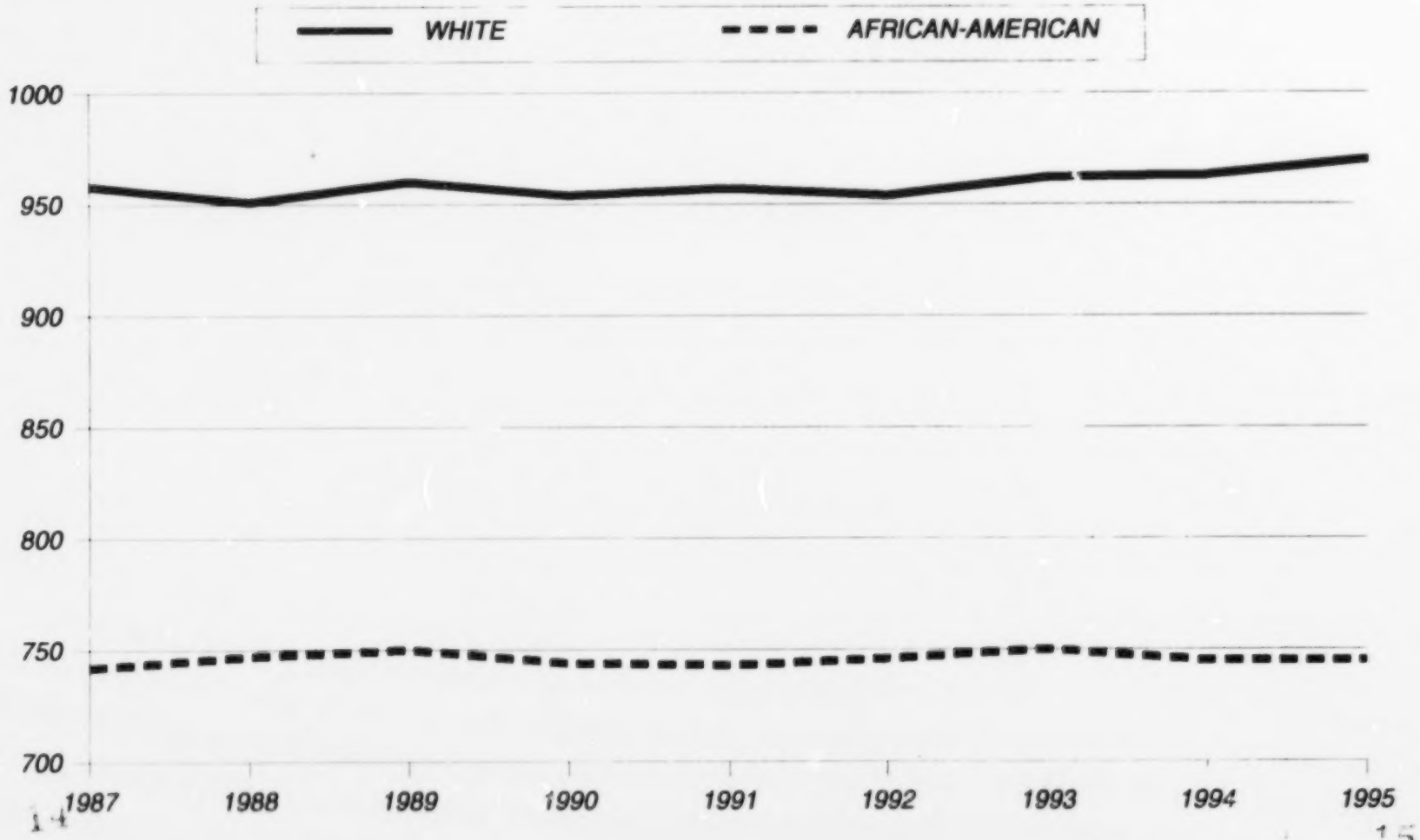
High School Academic Preparation

Substantial majorities of Maryland's college-going students reported having taken four years of English and at least three years of mathematics, natural science and social studies in high school. An increasing number of students are taking more courses in the sciences; 89 percent indicated they had taken three or more years of study in this area, compared to 79 percent in 1987. Students also are giving more attention to the foreign languages; the percentage of seniors who took three or more years of a language has risen steadily to 57 percent from 50 percent five years ago.

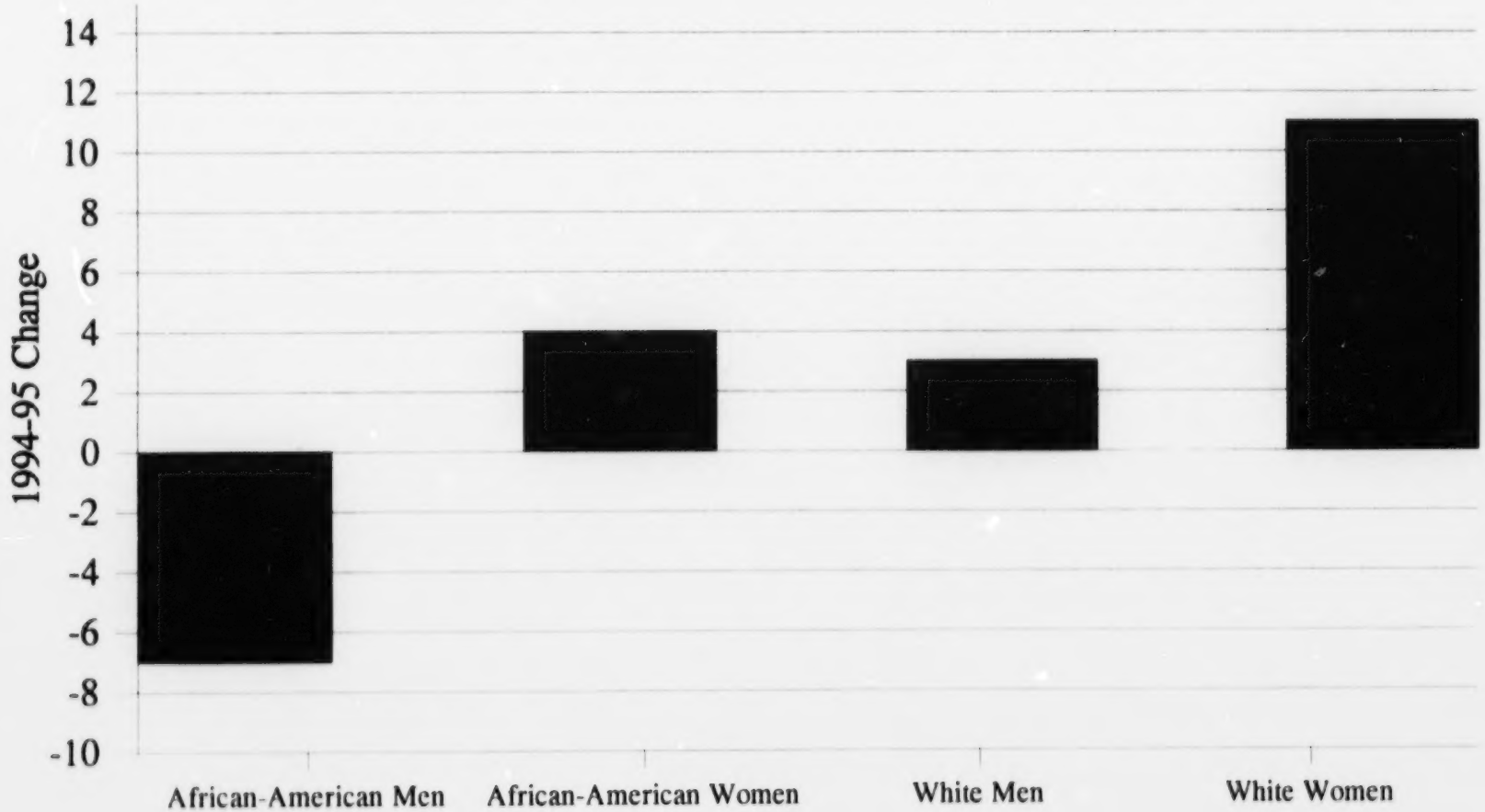
Composite SAT scores of Maryland students trail the national average for the first time since 1982.



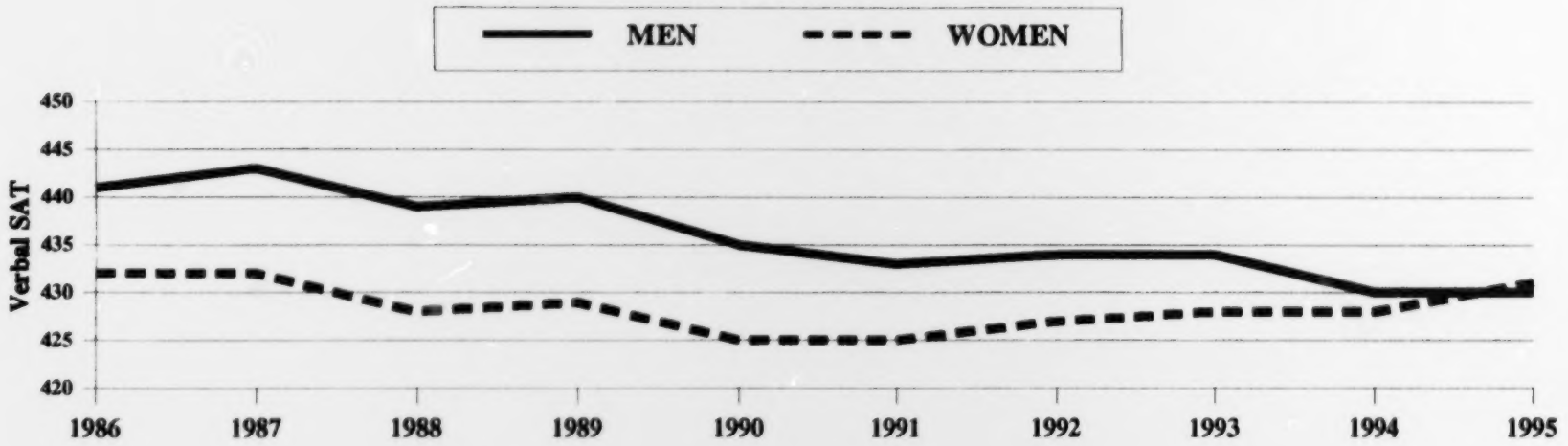
The composite SAT scores of African-Americans in Maryland have consistently trailed those of whites, and the gap has not narrowed.

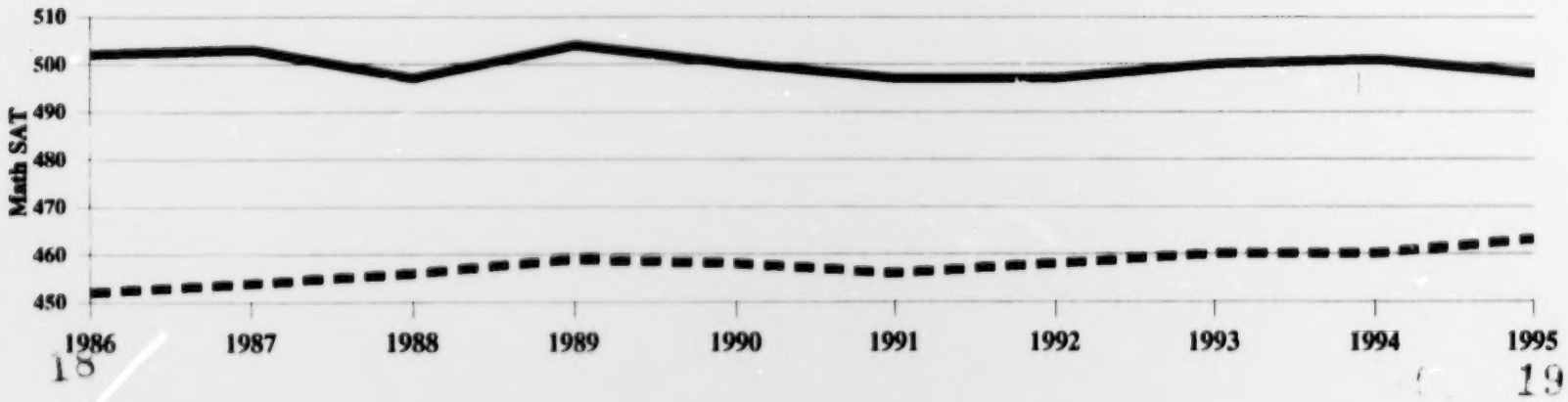


The composite SAT scores of African-American men in Maryland fell seven points in the past year, with all of the drop coming on the math portion of the test. The scores of African-American women, as well as white men and women, increased.



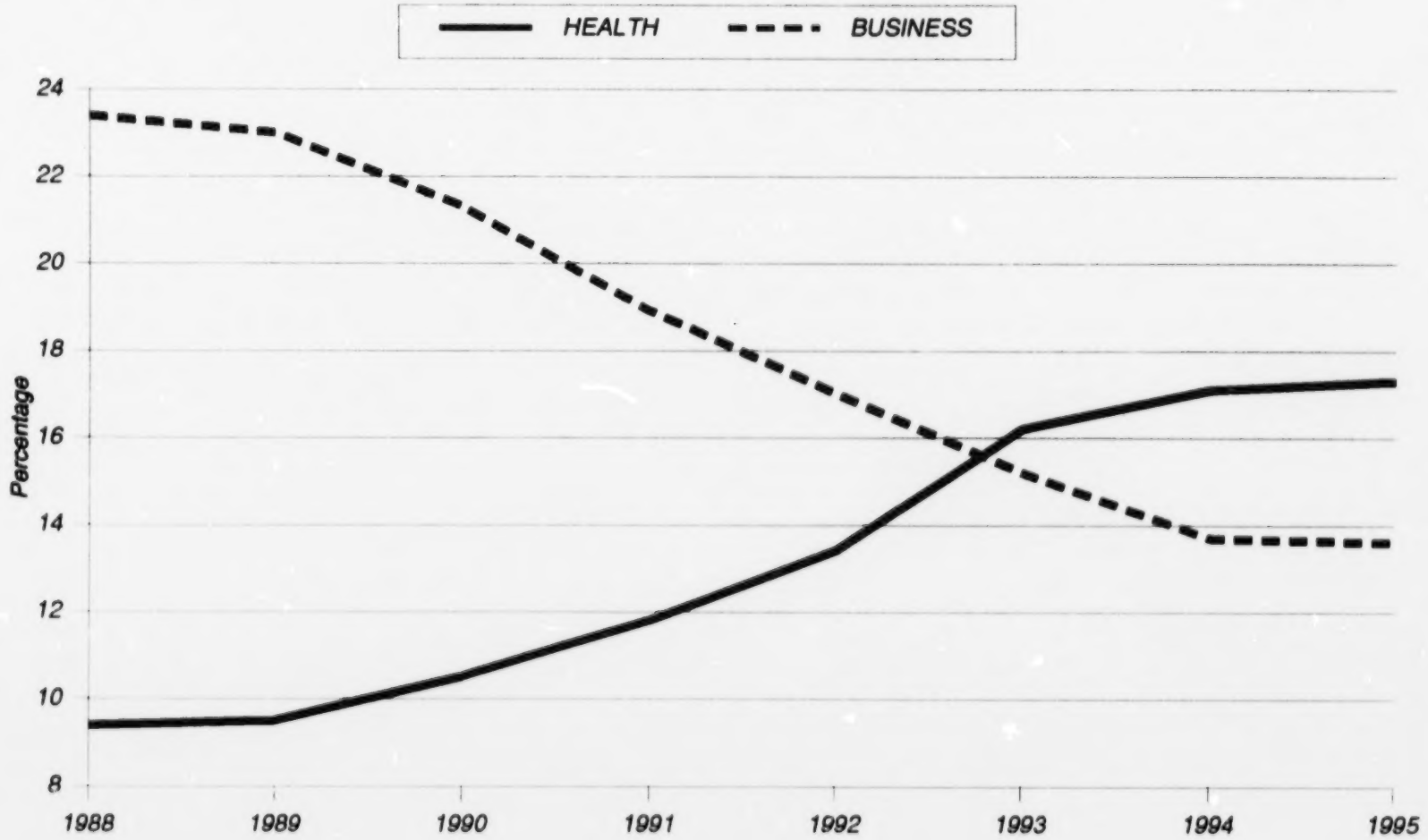
Maryland women have gained ground on men on both verbal and math SAT scores.





18 19

The percentage of Maryland students planning to major in health fields has risen sharply, while the proportion of those who intend to study in business has fallen.



Trends in SAT Scores of College–Going Students (Maryland and National)

	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1986–1995 Change
Maryland											
Verbal	436	437	433	434	430	429	431	431	429	430	–6
Math	475	477	475	480	478	475	476	478	479	479	+4
Composite	911	914	908	914	908	904	907	909	908	909	–2
National											
Verbal	431	430	428	427	424	422	423	424	423	428	–3
Math	475	476	476	476	476	474	476	478	479	482	+7
Composite	906	906	904	903	900	896	899	902	902	910	+4

Trends in SAT Scores of College–Going Students
By Gender

	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1986–1995 Change
Maryland											
Men											
Verbal	441	443	439	440	435	433	434	434	430	430	−11
Math	502	503	497	504	500	497	497	500	501	498	−4
Composite	943	946	936	944	935	930	931	934	931	928	−15
Women											
Verbal	432	432	428	429	425	425	427	428	428	431	−1
Math	452	454	456	459	458	456	458	460	460	463	+11
Composite	884	886	884	888	883	881	885	888	888	894	+10
National											
Men											
Verbal	437	435	435	434	429	426	428	428	425	429	−8
Math	501	500	498	500	499	497	499	502	501	503	+2
Composite	938	935	933	934	928	923	927	930	926	932	−6
Women											
Verbal	426	425	422	421	419	418	419	420	421	426	No Change
Math	451	453	455	454	455	453	456	457	460	463	+12
Composite	877	878	877	875	874	871	875	877	881	889	+12

Trends in SAT Scores of College-Going Students (African-Americans and Whites)

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1986-1995 Change
Maryland										
African-American										
Verbal	360	360	359	357	355	359	362	357	358	-2
Math	382	387	391	387	388	387	388	388	387	+5
Composite	742	747	750	744	743	746	750	745	745	+3
White										
Verbal	459	454	458	453	456	454	457	456	460	+1
Math	499	497	502	501	501	500	505	507	510	+11
Composite	958	951	960	954	957	954	962	963	970	+12
National										
African-American										
Verbal	351	353	351	352	351	352	353	352	356	+5
Math	377	384	386	385	385	385	388	388	388	+11
Composite	728	737	737	737	736	737	741	740	744	+16
White										
Verbal	447	445	446	442	441	442	444	443	448	+1
Math	489	490	491	491	489	491	494	495	498	+9
Composite	936	935	937	933	930	933	938	938	946	+10

Trends in SAT Scores of Maryland College-Going Students (By Race and Gender)

	1987	1994	1995	1987-1995 Change
African-American Men				
Verbal	364	352	353	-11
Math	400	402	394	-6
Composite	764	754	747	-17
African-American Women				
Verbal	357	361	362	+5
Math	370	379	382	+12
Composite	727	740	744	+17
White Men				
Verbal	464	458	460	-4
Math	525	530	531	+6
Composite	989	988	991	+2
White Women				
Verbal	454	454	460	+6
Math	475	487	492	+17
Composite	929	941	952	+23

Trends in Composite SAT Scores of College-Going Students in the Mid-Atlantic Region

	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1986-1995 Change
Delaware	917	910	899	903	903	892	895	894	892	897	-20
District of Columbia	NA	NA	NA	846	850	840	842	846	849	857	-
New Jersey	889	892	893	894	891	886	891	892	893	898	+9
New York	898	894	889	890	882	881	882	887	888	892	-6
North Carolina	835	838	841	836	841	844	855	859	860	865	+30
Pennsylvania	894	891	886	885	883	876	877	878	879	880	-14
Virginia	908	907	902	902	895	890	893	894	893	897	-11
Maryland	911	914	908	914	908	904	907	909	908	909	-2

Note: At least 50 percent of the college-bound high school graduates in the above states took the SAT.

Trends in SAT Scores of College-Going Students Who Ranked in the Top Tenth of Their High School Class

	1985	1987	1988	1989	1990	1991	1992	1993	1994	1995	1985–1995 Change
Maryland											
Verbal	533	536	532	532	530	526	524	528	522	528	−5
Math	593	597	595	599	599	591	591	595	590	599	+6
Composite	1126	1133	1118	1131	1129	1117	1115	1123	1112	1127	+1
National											
Verbal	516	518	515	515	512	512	512	513	512	518	+2
Math	577	585	585	585	585	584	585	586	586	594	+17
Composite	1093	1103	1100	1100	1097	1096	1097	1099	1098	1112	+19

Note: Data for 1986 not available.

Trends in Maryland Composite SAT Scores by Intended Major
College–Going Students

	1985	1987	1988	1989	1990	1991	1992	1993	1994	1995	1985–1995 Change
Mathematics	1043	1096	1069	1101	1090	1095	1062	1088	1075	1115	+72
Physical Sciences	1074	1098	1072	1099	1091	1075	1063	1064	1078	1091	+17
Letters (Lang/Lit)	1039	1063	1044	1053	1047	1058	1057	1067	1064	1040	+1
Foreign Languages	995	999	999	1008	997	1005	982	992	986	1014	+19
Biological Sciences	1010	995	995	991	986	984	982	988	989	998	−12
Engineering	1019	1023	1017	1023	1011	1015	1010	1015	1009	994	−25
Social Sciences	932	936	921	945	941	933	928	922	925	933	+1
Arts	858	894	883	898	898	880	894	904	906	918	+60
Architecture	928	934	909	934	888	904	908	913	909	916	−12
Communications	885	902	902	907	904	892	906	913	885	916	+31
Agriculture	864	894	891	889	888	896	895	889	885	895	+31
Health	897	904	895	900	891	887	896	897	889	893	−4
Computer Science	887	860	855	853	828	827	838	858	871	870	−17
Education	839	857	851	858	864	857	862	869	863	858	+19
Business	854	860	861	872	864	855	854	854	856	856	+2
Maryland Average	910	914	908	914	908	904	907	909	908	909	−1

Note: Data for 1986 unavailable.

Trends in Intended Major of Maryland College Bound Seniors

	1985 %	1987 %	1988 %	1989 %	1990 %	1991 %	1992 %	1993 %	1994 %	1995 %
Health	14.3	10.0	9.4	9.5	10.5	11.8	13.4	16.2	17.1	17.3
Social Sciences	12.7	14.1	14.7	15.7	15.8	15.8	15.6	15.4	15.6	14.9
Business	19.6	22.5	23.4	23.0	21.3	18.9	17.0	15.2	13.7	13.6
Engineering	11.8	11.3	10.2	10.3	10.0	10.7	10.9	10.3	10.1	9.2
Education	3.7	5.4	5.6	5.8	6.5	7.0	7.5	7.3	7.3	7.2
Biological Sciences	3.6	3.9	3.9	4.0	4.5	5.0	5.9	6.2	6.6	6.9
Arts	5.5	5.8	5.8	5.9	6.1	6.0	5.7	5.5	5.7	5.8
Communications	4.3	5.2	5.2	5.5	5.1	5.1	4.6	4.5	4.3	4.5
Computer Science	8.6	4.9	4.3	3.9	4.1	3.6	3.7	3.9	4.0	4.3
Architecture	1.7	2.7	3.1	3.0	3.1	3.1	2.9	2.6	2.5	2.2
Letters	1.6	1.4	1.4	1.4	1.3	1.3	1.4	1.3	1.4	1.4
Physcial Sciences	1.8	1.4	1.5	1.4	1.4	1.4	1.4	1.5	1.4	1.3
Agriculture	1.0	1.0	1.2	1.0	1.2	1.2	1.4	1.4	1.4	1.3
Mathematics	1.3	0.8	0.8	0.8	0.8	0.7	0.7	0.7	0.7	0.7
Trade/Voc	0.6	1.3	1.2	0.9	0.8	0.7	0.7	0.8	0.6	0.6
Foreign Languages	0.9	0.8	0.9	0.6	0.6	0.7	0.5	0.6	0.5	0.4
Home Economics	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Other	1.8	1.6	1.9	1.8	1.5	1.4	1.4	1.2	1.2	1.1
Undecided	4.9	5.5	5.0	5.2	5.1	5.2	5.1	5.1	5.7	6.8
Total	100	100	100	100	100	100	100	100	100	100

Note: Data for 1986 unavailable. Social Sciences include public affairs.

Trends in Maryland College–Going Students Who Took Rigorous Levels of High School Preparation

	1987	1988	1989	1990	1991	1992	1993	1994	1995
English (Four Years)	88%	88%	87%	87%	85%	83%	82%	87%	85%
Mathematics (Three or Four Years)	95%	95%	97%	98%	98%	96%	97%	99%	98%
Natural Science (Three or Four Years)	79%	78%	82%	83%	84%	84%	85%	89%	89%
Social Studies (Three or Four Years)	94%	94%	96%	95%	95%	94%	94%	96%	96%
Foreign Language (Three or Four Years)	52%	51%	51%	50%	51%	54%	54%	56%	57%